Measuring Dinosaurs

Exhibit Hall Activity

Grades K-2

Skills Practiced

- Measuring (standard and non-standard)
- Comparing

Concepts Explored

- Size of dinosaurs

Sample Objective

Students will be able to use standard and non-standard units of measurement to estimate the size of dinosaurs.

Background

Dinosaur size is a difficult concept for many students to grasp. Asking students to imagine a dinosaur the size of a chicken, a train locomotive, or a four-story building gets them one step closer to appreciating dinosaur size, but they still have to use their imaginations—after all, how many students have chickens, locomotives, or four-story buildings on hand? When you bring your students to visit the Museum's Terror of the South exhibit, they can get up close and personal with life-sized dinosaur skeletons and models. Using themselves as units of measurement, your students will get first-hand experience with dinosaur sizes.

Materials

- cloth measuring tape
- pencil
- blank sheet for recording data

Teacher Preparation

Collect the materials listed above.

Activity

As you and your students explore the *Acrocanthosaurus* exhibit, perform the following measuring activities as a group.

1. Find the life-sized model of a *Deinonychus* near the entrance of the Terror of the South exhibit. Imagine standing next to the dinosaur. How do you measure up? Are any of your students shorter than *Deinonychus*? Taller? Record your students' names in the appropriate categories.
   Shorter than *Deinonychus*
   Taller than *Deinonychus*
   Same size as *Deinonychus*
2. After entering the Terror of the South exhibit, estimate the lengths of the two dinosaurs on display, a life-sized *Pleurocoelus* model and a real *Acrocanthosaurus* skeleton, by forming a chain of students. Note: When the students form the chain, have them stretch their arms as far as they can and then hold hands with their neighbors. When you return to your classroom, you can reproduce both chains and determine the dinosaurs' lengths in feet or meters.
   Use a blank sheet to record the following:
   a. Number of students in the *Pleurocoelus* chain; names of the students in the chain.
   b. Number of students in the *Acrocanthosaurus* chain; names of the students in the chain.
4. Go to the dinosaur trackway display. There are several *Pleurocoelus* tracks and a single *Acrocanthosaurus* track on the floor under glass. Have your students stand over a *Pleurocoelus* footprint. How many students can fit into the track?
   Now have your students stand over the *Acrocanthosaurus* track. How many students fit into this footprint?
5. Go to the display containing the arms (from humerus to hand) of three different dinosaurs. Have your students compare the length of their arms to the length of the *Acrocanthosaurus, Tyrannosaurus,* and *Allosaurus* arms on display. Are there any students whose arms are the same length as *Acrocanthosaurus*' arm?
6. It is hard to tell the size of the three pterosaurs, called *Anhanguera*, soaring overhead. To get an idea of an *Anhanguera's* size, use a measuring tape to position 14 students at one-foot intervals along a straight line. When all the students are in position, the distance between the first and the last student will be 13 feet—or the wingspan of an *Anhanguera*.

Extensions

Using the same measuring techniques your students used at the Museum, have students compare the size of objects around your school grounds to the size of the dinosaurs they saw at the Museum. Is a school bus as long as *Pleurocoelus* or *Acrocanthosaurus*? What can you find that is as long as the wingspan of *Anhanguera*?